

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Avi Kliger et al.
Application No. : 09/943,424
Filed : August 30, 2001
Title of the Invention : HOME NETWORK SYSTEM AND METHOD
Art Unit : 2466
Examiner : Cassandra Decker
Confirmation No. : 7853

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICANTS'/APPELLANTS'
REPLY BRIEF UNDER 37 C.F.R. § 1.193(b)

Dear Sir:

Pursuant to 37 C.F.R. § 1.193(b), applicants/appellants file this Reply Brief in response to the Examiner's Answer dated February 22, 2010.

In view of the arguments and authorities set forth in the Appeal Brief and hereinbelow, this Board should find the rejection of claims 71, 73-82, 84-89, 96 and 98-106 of the above-identified patent application to be in error and should reverse it.

Arguments

I. Petler's Broadband Network Unit

The Examiner identified, as part of her rejections of the independent claims, that Petler's Broadband Network Unit (BNU) provides certain functions of a master module as claimed by the invention. Examiner's Answer, p. 16, lines 1-5. The Examiner further identified that Silverman's LAN controller provides certain other functions of a master module as claimed by the invention. Examiner's Answer, p.16, lines 5-7.

Applicants/appellants thank the Examiner for further clarifying her arguments.

Applicants/appellants respectfully assert that their previously submitted arguments were directed towards assumptions similar to the aforementioned identifications.

II. Petler Teaches Away from a Applicants'/Appellants' Invention

The Petler reference relates to a Fiber-to-the-Curb ("FTTC") network where signals are sent from a first in-home device to a FTTC terminal outside the home. From the remote FTTC terminal, signals are directed back to a second device in the same home. The remote FTTC terminal controls the communication between the in-home devices. Petler, Abstract; column 5, line 65-column 6, line 23.

Petler teaches away from applicants'/appellants' claimed invention.

Applicants'/appellants' claimed invention is a home network which utilizes in-home coaxial cable for direct inter-module communication. Independent claims 71, 82 and 96; Applicants'/appellants' Specification at page 2, lines 6-8 and page 11, lines 3-5; FIG. 1 elements 20 and 28¹, 28¹¹, etc. Petler teaches away from the use of an exclusively in-home network for device to device communications, stating that an "in-home coaxial network is not well suited for sending signals directly from one device to another." Petler, col. 2, lines 37-38.

The Examiner alleged that applicants/appellants quoted the aforementioned teaching of Petler "out of context." The Examiner further alleged that the paragraph in which the teaching away is found, i.e., Petler at col. 2, lines 34-49 (hereinafter, "the Paragraph"), "merely indicates a need to modify the splitters." Examiner's Answer, p. 16, lines 8-16.

Applicants/appellants submit that the Paragraph, when read as a whole, *further supports* Petler's teaching away and is not quoted out-of-context. Further, applicants/appellants submit that the Paragraph does not "merely indicate a need to modify the splitters," in contrast to the Examiner's allegations.

In the Paragraph, Petler teaches that in-home coaxial network is not well suited for sending signals from one device to another because in-home splitters exhibit low reflections for in-home signals. Petler, col. 2, lines 37-44; Examiner's Answer at p. 16, lines 13-15. Petler goes on to explain that, as a result of the in-home splitter's functionality, the receivers would need an "extremely large dynamic range" to support an in-home network. Petler, col. 2, lines 44-47. Petler concludes the Paragraph by stating that his invention, unlike exclusively in-home networks, requires that the splitters establish only one power level for communications with the BNU. Petler, col. 2, lines 47-49. Petler's conclusion emphasizes the desirability of his invention, and, consequently, the undesirability of in-home networks similar to applicants'/appellants' invention.

As stated above, the Examiner alleged that Petler's teaching that in-home splitters exhibit low reflections for in-home signals "merely indicates a need to modify the splitters." Examiner's Answer, p. 16, line 15. Applicants/appellants respectfully state further that Petler himself discourages such modification. Specifically, at col. 3, lines 12-16, Petler teaches that a system similar to Petler's in an in-home network environment is less advantageous because it would use "complicated standards" and "a wiring and connector system which does not exist in most homes." Thus, Petler teaches that the complications associated with in-home networks are too complex to be easily solved. Therefore, contrary to the Examiner's assertions, Petler's statement that in-home splitters exhibit low reflections for in-home signals supports his teaching that in-home coaxial networks are not well suited for inter-module communication.

Moreover, relevant case law classifies statements such as those found in the Paragraph as statements that *teach away* from a claimed invention. "A prima facia case of obviousness can be rebutted if the applicant ... can show 'that the art in any material respect taught away' from the claimed invention." *In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997), internal citations omitted. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference ... would be led in a direction divergent from the

path that was taken by the applicant.” *Tech Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999).

In accord with the aforementioned case law, Petler, in the Paragraph found at paragraph 2, lines 34-49, leads a person of ordinary skill in the art in a direction divergent from applicants’/appellants’ in-home network. Not only does Petler explicitly state that in-home networks are undesirable, but Petler goes on to strengthen the perception of the undesirability of an in-home network by pointing to the low reflection capacity of in-home splitters. Additionally, the Paragraph, when read alone or in combination with Petler col. 3 lines 12-16, emphasizes the complications associated with exclusively in-home networks.

In conclusion, Petler teaches away from an in-home coaxial network with device to device communication for at least the reasons set forth above. Thus, Petler teaches away from applicants’/appellants’ claimed invention and the rejection of independent claims 71, 82 and 96 in view of Petler is in error and should be reversed.

III. The Networks of Petler and Silverman Cannot be Combined

Moreover, the networks of Petler and Silverman cannot be combined to form the claimed invention because Petler’s system cannot coexist with Silverman’s LAN. Petler’s devices in home 250 communicate with each other by sending information from a first in-home device 140 through splitter 220 to BNU 110 over twisted pair cable or a subscriber coaxial network. Petler, FIG. 1; col. 3, lines 60-64 and col. 5, line 65-col.6, line 2. In contrast, Silverman’s channel stripper 21 *blocks* the data contained in Silverman’s in-home network from entering CATV cable 3. Silverman FIG. 5; col. 5, lines 9-14. Thus, the networks of Petler and Silverman cannot be combined because Petler’s splitter allows network data to pass out of the home whereas Silverman’s splitter blocks the home network data from leaving the home.

A suggested combination of prior art is not a proper ground for rejection if the combination of references would “require a substantial reconstruction and redesign of the elements shown … as well as a change in the basic principles under which the … [prior art] construction was designed to operate.” *In re Ratti*, 270 F.2d 810 (1959). The suggested combination of Petler and Silverman would require the redesign of the in-home splitters found in the respective references. Additionally, moving Petler’s BNU into the

home would change the basic principle under which Petler is designed to operate – i.e., that the BNU is outside the home.

While the Examiner did not directly address applicants'/appellants' aforementioned non-combinability argument, nevertheless, the Examiner referenced Petler at col. 3, lines 8-16, and specifically Petler at col. 3, lines 8-11, which states that it is "counterintuitive" to send LAN signals out to the BNU and back to the home. Examiner's Answer, p.16, line 20. The Examiner concluded that Petler's "counterintuitive" statement provides the motivation "to move the pertinent functionality of the BNU into the home." Examiner's Answer, p. 16, lines 20-22.

Applicants/appellants draw the Examiner's attention to the sentence immediately following Petler's "counterintuitive" statement, where Petler states that: "[t]herefore, my present invention exhibits many advantages over other complex in-home digital networks which route signals through the home based on complicated standards and a wiring and connector system which does not exist in most homes." Petler, col. 3, lines 12-16.

Accordingly, applicants/appellants do not find support for the Examiner's statement that Petler at col. 3, lines 8-16, provides motivation to move the BNU into the home. Rather, Petler at col. 3, lines 8-11, explains that it is counterintuitive to send LAN signals out to the BNU and back to the home, in order to support his statement in the following sentence. The following sentence, at col. 3 lines 12-16, sets forth that *despite* the seeming counterintuitive quality of his system – i.e., that signals have to leave the home when traveling from one device to another – Petler's network is advantageous over an exclusively in-home network. The undesirable features of in-home networks that Petler lists include: their complexity, complicated standards and the fact that their required connector systems are not found in most homes. Thus, Petler at col. 3, lines 8-16, provides motivation to keep the BNU outside of the home, in contrast to the Examiner's assertions.

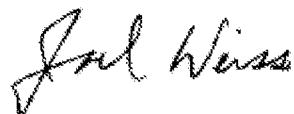
In conclusion, the networks of Petler and Silverman cannot be combined because Petler's splitter *allows* network data to pass out of the home to the BNU whereas Silverman's splitter *blocks* the home network data from leaving the home. In addition, Petler at col. 3, lines 8-16, provides no motivation to combine Petler and Silverman. Instead, Petler at col. 3, lines 8-16 further supports the undesirability of a Petler/Silverman

combination to form the claimed invention. Applicants/appellants submit that for this additional reason, the rejection of independent claims 71, 82 and 96 is in error and should be reversed.

Conclusion

This application is in condition for allowance at least because Petler teaches away from applicants'/appellants' claimed invention. This application is also in condition for allowance because Petler's network cannot be combined with Silverman's LAN. Thus, the Examiner's rejection of independent claims 71, 82 and 96 should be reversed, and this application should be allowed.

Respectfully submitted,



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